

Research for Improved Nursing Practices

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In the year ahead, what can we expect from the profession of nursing in the way of progress toward more satisfactorily meeting the needs of people for service?

One important development, which will bear watching during 1952, is the trend toward analyzing all phases of nursing care—the techniques themselves, the amount and nature of the service provided, the administration of this service, and the education which prepares nurses to give it—all culminating in a study of the effect of nursing services on individual patients and population groups.

Last November the American Nurses Association reported that its clearinghouse for nursing studies had recorded and reviewed over 400 projects under way, analyzing a wide variety of aspects of nursing. What is significant, however, is not the number of studies, the sizable amounts of money appropriated for research in the nursing field, nor the number of people involved in survey processes. What is significant is the fact that the propelling force behind all this activity is the earnest desire to mold nursing into the shape of things to come, the desire to make the profession a continuing dynamic force in the total health program.

Analytical studies have grown out of the need to find practical ways of relating nursing to the increasing complexity of health services and of utilizing most effectively and economically the available nurse supply in the face of increasing

demands. Although the majority of studies are nurse-initiated, all involve the cooperation and participation of doctors and hospital or health administrators, and of other groups, such as social scientists and industrial-management engineers. All are long range, but this year and each year the data developed will add to our knowledge of how nursing service may keep moving forward in the interest of better patient care.

Studies of nursing functions and administrative studies comprise the largest areas of investigation. Both are fundamental to improving the nursing aspects of the therapeutic and preventive programs.

Analyses of Nursing Functions

In 1950, the American Nurses Association launched a "Five-Year Plan" for research in nursing and authorized that special funds, obtained from voluntary membership contributions, be set aside for this purpose. The program was in response to requests from the membership for studies which would help determine what nursing functions should be in terms of new patterns of medical care and use of new types of personnel, and also to determine the number of hours of care needed per patient per day under different circumstances.

A system has been worked out through which hospitals, universities, State nurse associations, and other interested groups may submit a nursing-study design to the ANA through the State nurses association. The plan will be reviewed by the ANA's Technical Committee on Research and, if approved, the ANA may issue a grant from its special fund to finance the proposed research. Further, the ANA will coordinate the individual studies into an integrated whole, benefiting the entire nursing profession, and

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report, interpret, and implement the coordinated findings to all interested groups. For the time being, grants are being limited to functional analyses of the job of nursing personnel in hospitals.

Although many individual institutions have undertaken time and function studies, the ANA program is the first attempt on a national basis to focus the research spotlight on common problems in an effort to find common solutions.

Acknowledging the responsibility and prerogative of the profession to undertake research in nursing functions, the ANA defined the broad purpose behind such studies as follows:

1. To improve nursing care and to utilize nursing personnel economically and effectively by determining functions and relationships of institutional nursing personnel of all types—professional nurses, practical nurses, auxiliary workers.

2. To determine what proportion of nursing time should be provided by each group in various situations.

3. To develop techniques which can be applied to all hospitals, and thus obtain a national picture.

The association foresaw that it would be necessary to establish a relationship between all nursing functions before it would be possible to obtain complete knowledge of professional nursing functions, and also that fact-finding must cover all nursing positions in hospitals and in all clinical fields. It also recognized the fact that job satisfactions, personal relationships, and factors motivating job changes may contribute to the determination of professional nursing functions. These assumptions shaped the master plan under which proposals for research are being considered.

One proposed study which has already been authorized will determine current practices of professional nurses, practical nurses, and auxiliary personnel in a representative sample of hospitals. From the findings, it is intended that recommendations will be made as to the proper distribution of functions among all types of nursing personnel in hospitals.

Another study proposes to develop norms for good nursing care, to experiment with the team approach in nursing—including practical nurses and nonnursing personnel—and to im-

prove techniques. It also intends to explore in-service education and to establish criteria for evaluating this in terms of improved service to the patient.

Studies such as these are expected to offer valuable clues to new staffing patterns in which the functions of the professional nurse would be those for which professional nursing skills are necessary, patterns which would result in more effective care for patients and possible savings in the total cost of staffing. It can also be expected that when we have defined current practices and have examined them in relation to the needs of patients we will learn how the basic and advanced curricula may be revised to keep nursing education in step with changing concepts. And, by knowing the number of nursing hours required per patient per day, we can estimate not only the number of nurses and other personnel needed but also the types of persons we need to recruit.

Some studies will afford the individual nurse the opportunity better to understand her role on the nursing service team; some will lead to assignments which challenge her professional potentialities beyond her present role. Thus, research can contribute both to the personal security of nurses themselves and to the satisfactions of nursing as a career.

Administrative Studies

Research in nursing administration is being conducted in hospitals and in public health agencies. A wide variety of studies are in process, the majority designed either to evaluate the cost of nursing service in terms of the kind of care provided, or to determine the effect of interpersonal relationships in nursing service, or to measure the activities of nurses in management roles in hospitals. This paper will attempt to mention only a few which are typical.

Public Health Nursing Studies

Immediately following the war, public health nursing agencies through their national organization, the National Organization for Public Health Nursing, took steps to analyze the costs of public health nursing services. The NOPHN launched a study to develop cost ac-

counting methods for public health nursing service in visiting nurse associations and health departments (1). When this method was applied in 73 agencies across the country, many interesting facts were revealed. There were striking differences in costs in different agencies, the reasons for which were not all revealed by a superficial study of the data submitted. Differences in salaries—the largest item in each budget—did not account for the entire difference in the cost of an item of service, such as a home visit, or the nursing service cost per patient-clinic visit.

The cost study of these first 73 agencies provokes many questions. For example, on the average does the agency which spends a longer time in preparation and a shorter time in the actual visit accomplish more with its patients than the one with shorter preparation time and longer visiting time? Is the average length of visit in an agency an index of effectiveness? Is the cost per individual attending group conferences any indication of the quality of services rendered? These and many other questions await investigation.

Another analysis recently completed is "A Study of Combination Services." There are at present over 40 agencies in this country in which the health department and the visiting nurse association have joined forces. This movement has been growing very slowly over the past 20 years, and the study of five successful amalgamations was made in order to disseminate information regarding patterns which had worked. This analysis and its widespread distribution may stimulate many communities to consolidate two or more public health nursing agencies into one (2).

Continuing analyses of the services offered in public health nursing programs are carried on constantly through study of annual reports in relation to local morbidity and mortality statistics. Special case-load studies are conducted from time to time in many agencies. As a result, public health nursing is shifting emphasis to care of chronic illness, home care of patients who in former days would have remained in hospitals, and to prevention of home, farm, and school accidents. In several agencies, the investigation by public health nurses of fatal home accidents has led to a great increase in

the reporting of accident hazards by the nurses and in the number corrected. This is another example of the increased awareness of community needs which studying a problem gives to the investigator.

With the ever-expanding program of services in public health agencies, there is need for studies to evaluate the demands made on nursing time in the maintenance of maximum effectiveness in both the established and proposed programs. In the past 2 years, the Public Health Service has contributed to two such studies in venereal disease case finding (3). In North Carolina, the study was concerned with priorities in nursing time for venereal disease service in a generalized nursing service. In Mississippi, the study had as its purpose the determination of the needs in the maternal-child health program to prevent congenital syphilis.

A study of the functions of nurses in industry, jointly sponsored by the Divisions of Occupational Health and Public Health Nursing of the Public Health Service, has been under way for the past year. Data have been assembled and the analysis will reveal essential information on the amount and kind of nursing service required in certain types of industries. In addition to providing essential information for industry, it will enable States and the Nation to make better estimates of their total nursing needs.

For some time, public health nurses have been questioning current practices of recording and reporting. Is there no better way of evaluating services or accounting for work done than by counting noses? So many patients seen at home, so many at the clinic, so many at the class for mothers. The number who turn up at clinic or class at least have evidenced a desire for the service. Beyond that, how have they benefited and how have those at home benefited from the visit of the public health nurse? We might make an analysis of the "satisfactory" and "unsatisfactory" conditions found on each contact with a patient. These terms, "satisfactory" and "unsatisfactory," represent the health problems the patient brings to the surface and also the ones the health worker perceives. Then, a report of the progress or lack of progress in the conditions noted might

give us some clue to what we are accomplishing.

If we can get such a measure of accomplishment and of time needed to achieve desired results with a substantial percentage of our patients, we can determine in relation to the health needs of a community how many public health nurses we should have per population unit under varying conditions.

Interpersonal Relationships

In February 1950, Dr. Leo Simmons, on a grant from the Russell Sage Foundation, began at the New York Hospital an extensive series of investigations into the problems of interpersonal relationships and their bearing upon patient welfare (4). Several of these studies are concerned with the physician-nurse-patient relationship. The premise of the studies is that if these relationships are strained or disrupted, if frictions occur and persist, the patient will suffer—just as he will benefit if, on the other hand, harmony and understanding prevail.

One series now under way is analyzing the dynamics of physician-head nurse relationship within the framework of ward routines as developed over a long period of medical practice in institutions.

Another series of studies is exploring the association of nursing service personnel with patients, including not only the head nurse but the patient contacts of staff and student nurses, social workers, technicians, and attendants. Are the working relations between patient and nonmedically oriented personnel warmer and more intimate (and perhaps therefore more constructive) than those which exist on a more formalized medico-nursing level? What effect may this situation have on patient cooperativeness and ultimate recovery? Answers to these questions are expected as the research progresses.

Dr. Simmons (4) is using the recorded interview technique for the compilation of data and has held many conferences with the nurses of New York Hospital in which he has explained both the purpose of his studies and the study method. The response from nursing personnel—all the way from the student nurse to the nurse administrator—has been enthusiastic, indicating the high regard nurses have today for

research designed to shed light on the nursing aspects of patient well-being. It is expected that some of the preliminary findings of these studies may be published during 1952.

Management Studies

Many hospitals are engaged in analyzing nursing service units to find out whether or not there is a costly misuse of professional nursing personnel and, if so, how this may be remedied. An example of investigation along these lines (prompted by the acute shortage of nursing personnel and the need for better utilization of the existing supply) is a project being conducted in selected hospitals in Michigan under the direction of Harper Hospital in Detroit and with the cooperation of Wayne University.

Other hospitals desiring to study their own situations requested the Division of Nursing Resources, Public Health Service, to devise a method of studying nursing service activities on various levels so that data may be compiled leading to changes and improvements in responsibilities and functions.

Serious consideration was given to the question of where such studies should begin. On the administrative level, with the director of nursing service? With staff nurse, at the level of closest nurse-patient contact? Or, between those extremes, with the head nurse, whose key role in ward management makes her the focal point in the kind and amount of care afforded patients?

It was decided to study head-nurse activities first, for, in the kaleidoscope of her day, the head nurse must be all things to all people, and direct services which impinge upon patient well-being. She is the doctor's most direct source of information about patients; she is the link between ward personnel and hospital management. Other departments of the hospital serve patients through her, and families and friends of patients turn to her for guidance and facts about progress and ultimate recovery. Her responsibilities range from specific problems of administration to the more subtle aspects of patient education and maintenance of a happy as well as efficient environment for everyone on her ward.

In conjunction with the Massachusetts General Hospital, the Division of Nursing Re-

sources conducted a 5-day pilot study from which a study method was developed and applied in five wards of the hospital early last year. The results of the study have been published (5) and the method has been spelled out in a manual (6) which was issued last June. This method is now undergoing extensive field trials.

The Massachusetts General Hospital study disclosed that head nurses were spending about half their time in activities related to the care of patients. It also showed that, despite the employment of clerks on the wards, a third of the remaining activities could have been performed by clerical or other personnel.

While the ratio of patient care to total time was a wholesome one, other areas of head-nurse responsibility did not show up so well. For example, she had only 14 minutes each day for making assignments, 3 minutes for supervision, guidance, and evaluation of staff performance. She was able to find only 21 minutes a day, at widely separated short intervals, for teaching students and staff; the function of patient education received only 10 minutes of her time. However, observation of patients revealed well-cared-for, contented patients. This raises questions as to whether our assumptions as to the proper functions of a head nurse need to be examined and revised.

When units showed a relatively low number of hours of care per patient, the head nurse was providing the necessary patient care which professional and nonprofessional (staff) personnel would have given if they had been available. She was also spending time on checking and serving trays, which might have been allocated to the dietary or other departments.

On the basis of these findings, is the head nurse's time producing dollar-for-dollar value to patients and to the hospital? Is it providing a work situation which produces satisfactions for the head nurse in terms of use of her special management skills and professional knowledge?

After participating in the study, head nurses at MGH said that they were better able to see how they could organize their plans more effectively, why they should—and how they could—delegate many of their duties, and to

recognize the need to restudy and to reorganize work schedules for ward clerks. The hospital itself was able to see that service to patients could be improved if the head nurse could be relieved of duties reassignable to clerks and other personnel, and apply that additional time to supervision of patient care and personnel administration.

Thus, with facts on how head nurses spend their time, hospitals can put themselves in the position of helping their head nurses spend it more effectively and can cooperate with nursing service administrators in an effort to develop improved methods of staffing.

Additional studies will determine how head-nurse activities have been affected by reorganization resulting from this study; one project will attempt to determine how the use of nursing service "team assignments" may alter the pattern of head-nurse activity.

During the year ahead, the Division of Nursing Resources and interested hospitals will cooperate again in further nurse-management studies. For example, during the past year, in efforts to find ways of reducing the cost of nursing service, the division raised the question of whether or not the functions now performed by supervisors might be assigned to other personnel. The position of supervisor was established when not every ward had a head nurse. However, present-day medical care, with its rapid turn-over of patients and concentration of acutely ill patients, requires that each nursing unit have a full-time head nurse. Under these circumstances, the activities of the supervisor may need reallocation. New study methods will be devised to find out whether or not this may be so and, if so, to what extent the present nursing administrative staff might be reduced or would need to be augmented.

Summary

The foregoing has presented a brief sample of the kind of analytical studies in which nurses and nursing organizations are participating. The fact that these studies utilize the research skills not only of professional nurses but of related experts—social scientists, statisticians, anthropologists, industrial management engi-

neers—shows the growth of nursing in its capacity to work with others in solving problems directly associated with the improvement of service to people. Research in nursing functions and nursing service administration gives high promise of better patient care and more economical utilization of nursing personnel in the future.

REFERENCES

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- (5) Olson, Appollinia Frances, and Tibbitts, Helen G.: A study of head nurse functions in a general hospital. Public Health Monograph No. 3 (PHS Publication No. 107). Washington, D. C., U. S. Government Printing Office, 1951.
- (6) U. S. Public Health Service: Head nurse power and how to use it. Manual of the Division of Nursing Resources. Washington, D. C., 1951. Mimeographed.

CDC Laboratory Training Courses, 1952

The laboratory training courses given by the Communicable Disease Center of the Public Health Service have been scheduled for 1952 as follows:

Bacterial diseases:

Part 1. General bacteriology, February 11-22; September 2-12.

Part 2. General bacteriology, February 25-March 7; September 15-26.

Enteric diseases: Enteric bacteriology, March 10-21; September 29-October 10.
Microbiology for public health nurses, May 19-23.

Mycology:

Part 1. Cutaneous and subcutaneous fungi, March 31-April 11.

Part 2. Systemic fungi, April 14-25.

Parasitic diseases:

Part 1. Intestinal parasites, February 11-March 7; September 2-26.

Part 2. Blood parasites, March 10-23; September 29-October 17.

Pulmonary mycoses, November 24-December 12.

Rabies, April 7-11; December 1-5.

Syphilis:

Serology, January 14-25; March 10-21; April 14-25; May 12-23; September 8-19; October 13-24.

Preparation and use of controls in serologic tests, November 3-21.

Tuberculosis, April 14-25; November 10-21.

Venereal diseases, May 12-16.

Virus diseases, March 10-21; November 10-21.

Courses in laboratory diagnosis designed for laboratory directors, senior laboratory staff members, physicians, and others of comparable professional standing:

Bacterial diseases, May 12-16; October 27-31.

Parasitic diseases, May 12-16; November 10-14.

Tuberculosis, May 19-23; November 3-7.

Venereal diseases, May 12-16.

Virus diseases, May 12-16; November 24-28.

Medical mycology: Laboratory methods, November 17-21.

Treponema pallidum: Immobilization test, May 19-23.

Information and application forms should be requested from the Officer in Charge, Laboratory Training Services, Communicable Disease Center, Public Health Service, P. O. Box 185, Chamblee, Ga.